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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Original) A production system for producing a VIPDL output stream from a dynamic

document and a recipients list comprising:

a data iterator for iterating through said recipients list one record at a time and

computing values for each dynamic object in said dynamic document for said

record:

a document instantiator for creating an instance document for said record;

an output generator operating in tandem with said document instantiator for

generating code specifying the rendering of said document instance; and

a merge component for generating said VIPDL output stream from output of said

output generator.

2. (Original) A production system according to claim 1, wherein said VIPDL output

stream is defined in an object-oriented (rendering) specification language.

3. (Original) A production system according to claim 2, wherein said object-oriented

specification language is VPS.

4. (Original) A production system according to claim 2, wherein said object-oriented

specification language is PPML.

5. (Original) A production system according to claim 1, wherein said VIPDL output

stream is defined in HTML.

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6. (Original) A production system according to claim 1, and also comprising a content objects buffer for allowing said data iterator and said document instantiator to operate in a producer consumer manner.

 (Original) A production system according to claim 1, wherein said merge component comprises:

a definitions dictionary comprising reusable object names and their definitions;

a booklets section comprising layout information for pages of dynamic document instances; and

a merge processor for generating said VIPDL output stream from contents of said definitions dictionary and said booklets section.

 (Original) A production system for producing a VIPDL output stream from a dynamic document and a recipients list comprising:

a parts generator for breaking said recipients list into a plurality of parts;

a plurality of pipelines for parallel processing of said recipients list;

a plurality of definitions dictionaries for receiving reusable object definitions from said plurality of pipelines;

a plurality of booklets sections for receiving layout information from said plurality of pipelines; and

a merge processor for generating said VIPDL output stream from contents of said plurality of definitions dictionary and said plurality of booklets section.

 (Currently Amended) A method for producing a VIPDL output stream from a dynamic document and a recipients list comprising the steps of:

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selecting a next record from said recipients list;

generating a document instance from said dynamic document for said selected record from said recipients list;

generating entries in a definition dictionary corresponding to reusable objects in said dynamic document;

generating a rendering specifications section for said generated document instance;

concatenating said rendering specifications section into said VIPDL output stream; and

repeating said step steps of selecting, said first step of generating a document instance, said second step of generating, said third step of generating a rendering specifications section, and said step of concatenating until said recipients list has been exhausted: and

generating an elements definition section from the information in said definitions dictionary and pre-pending said elements definition section at the head of said VIPDL output stream

10. (Currently Amended) The method according to claim 9, further comprising the steps of generating entries in a definition dictionary corresponding to reusable objects in said dynamic document and generating elements definition section from the information in said definitions dictionary and pre-pending said elements definition section at the head of said VIPDL output stream, wherein said step of selecting a next record from said recipients list, said-first-step of generating a document instance; said

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seeend—step of generating entries in a definition dictionary, said third step of generating a rendering specifications section, said step of concatenating, said step of repeating, and said fourth step of generating elements definition section are performed by pipeline processing.

 (Currently Amended) A method according to claim 9, wherein said first step of generating <u>a document instance</u> [[also]] comprises the steps of:

> collapsing all the queries for the set of said dynamic content objects into one query; and

computing said one query.

12. (Currently Amended) A method according to claim 9, wherein said first step of generating a document instance [[also]] comprises the steps of:

caching views generated by queries; and

reusing said cached views.

- (Original) A method according to claim 9, wherein said VIPDL output stream is defined in an object-oriented specification language.
- (Original) A method according to claim 13, wherein said object-oriented specification language is VPS.
- (Original) A method according to claim 13, wherein said object-oriented specification language is PPML.
- (Original) A method according to claim 9, wherein said VIPDL output stream is defined in HTML

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17. (Currently Amended) A method for producing a VIPDL output stream from a dynamic document and a recipients list comprising the steps of:

receiving a recipient list;

dividing said recipients list into a plurality of distinct parts;

performing parallel processing to merge said dynamic documents independently [[for]] with each of said parts; and

merging a plurality of definition dictionaries and a plurality of rendering specifications sections created in said step of performing into one VIPDL output stream corresponding to said entire recipients list

- 18. (Currently Amended) The method according to claim 17, further comprising the step of merging a plurality of definition dictionaries and a plurality of rendering specifications sections created in said step of performing into one VIPDL output stream corresponding to said entire recipients list, wherein said step of performing selecting, said first step of generating; said second step of generating, said third step of, said step of concatenating, said step of repeating, and said fourth step of generating [[are]] is performed by pipeline processing.
- 19. (Original) A method according to claim 17, wherein said step of performing further comprises the step of:

using a gossiping mechanism to reduce redundancy in said plurality of definition dictionaries.

20. (Currently Amended) A method according to claim 17, wherein said step of performing further comprises the steps of:

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selecting a next record from said recipients list;

generating a document instance from said dynamic document for said selected record from said recipients list;

generating entries in a definition dictionary corresponding to dynamic content objects in said dynamic document;

generating a rendering specifications section for said generated document instance;

concatenating said rendering specifications section into said VIPDL output stream;

repeating said step of selecting, said first step of generating a document instance; said second step of generating entries in a definition dictionary, said third step of generating a rendering specifications section, said step of concatenating until said recipients list has been exhausted; and

generating an elements definition section from the information in said definitions dictionary and pre-pending said elements definition section at the head of said VIPDL output stream.

 (Currently Amended) A method according to claim 20, wherein said first step of generating a document instance [[also]] comprises the steps of:

collapsing all the queries for the set of said dynamic content objects into one query; and

computing said one query minimizing joins.

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 (Currently Amended) A method according to claim 20, wherein said first step of generating a document instance also comprises the steps of:

collapsing all the queries for the set of said dynamic content objects into one query; and

computing said one query minimizing re-selections.

23. (Currently Amended) A method according to claim 20, wherein said first step of generating a document instance also comprises the steps of:

caching views generated by queries; and

reusing said cached views.

- (Original) A method according to claim 17, wherein said VIPDL output stream is defined in an object-oriented specification language.
- (Original) A method according to claim 24, wherein said object-oriented specification language is VPS.
- (Original) A method according to claim 24, wherein said object-oriented specification language is PPML.
- (Original) A method according to claim 17, wherein said VIPDL output stream is defined in HTML

28-31 (Cancelled)